International Application No PCT/IB2004/002655

a. classification of subject matter IPC 7 A61L9/12 F24F3/12

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC $\frac{7}{4}$ A61L F24F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2001/023593 A1 (IMASAKA TOSHIYUKI ET AL) 27 September 2001 (2001-09-27) paragraphs '0005! - '0018!; figure 1	1-11
A	WO 99/59832 A (HARA SHINICHI ; HAYASHI NAOTO (JP); ZEXEL CORP (JP)) 25 November 1999 (1999-11-25) abstract; figures 5,6	1-11
A	US 2002/197186 A1 (MURRAY JOSEPH C) 26 December 2002 (2002-12-26) abstract; figures 1,12	1-11
Α	US 2001/035095 AI (CANFIELD DAVID) 1 November 2001 (2001-11-01) abstract; figure 1	1-11
	-/	·

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: A* document defining the general state of the art which is not considered to be of particular relevance E* earlier document but published on or after the international filing date L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) O* document referring to an oral disclosure, use, exhibition or other means P* document published prior to the international filing date but later than the priority date claimed	 *T* tater document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family
Date of the actual completion of the international search 9 November 2004	Date of mailing of the international search report 17/11/2004
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo nl, Fax. (+31–70) 340–3016	Authorized officer Valenza, D

7

International Application No
PCT/IB2004/002655

Category Citation of document, with Indication, where appropriate, of the relevant passages Relevant to claim No.			PC1/1B2004/002033		
A PATENT ABSTRACTS OF JAPAN vol. 0186, no. 69 (M-1725), 16 December 1994 (1994-12-16) & JP 6 262937 A (ZEKEL CORP), 200 September 1994 (1994-09-20) abstract A PATENT ABSTRACTS OF JAPAN vol. 1999, no. 13, 30 November 1999 (1999-11-30) & JP 11 211126 A (SHARP CORP), 6 August 1999 (1999-08-06) abstract				Delevent to eleter the	
vol. 0186, no. 69 (M-1725), 16 December 1994 (1994-12-16) & JP 6 262937 A (ZEXEL CORP), 20 September 1994 (1994-09-20) abstract PATENT ABSTRACTS OF JAPAN vol. 1999, no. 13, 30 November 1999 (1999-11-30) & JP 11 211126 A (SHARP CORP), 6 August 1999 (1999-08-06) abstract	calegory °	Chauson of document, with indication, where appropriate, of the relevant passages		Helevani io cialm No.	
vol. 1999, no. 13, 30 November 1999 (1999-11-30) & JP 11 211126 A (SHARP CORP), 6 August 1999 (1999-08-06) abstract	A	vol. 0186, no. 69 (M-1725), 16 December 1994 (1994-12-16) & JP 6 262937 A (ZEXEL CORP), 20 September 1994 (1994-09-20)		1-11	
	1	vol. 1999, no. 13, 30 November 1999 (1999-11-30) & JP 11 211126 A (SHARP CORP), 6 August 1999 (1999-08-06)		1-11	

BEST AVAIL

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/IB2004/002655

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 2001023593	A1	27-09-2001	JP	2001248852	Α	14-09-2001
WO 9959832	Α	25-11-1999	JP JP JP WO	11321297 11325652 11342729 9959832	A A	24-11-1999 26-11-1999 14-12-1999 25-11-1999
US 2002197186	A1	26-12-2002	US	2002197187	A1	26-12-2002
US 2001035095	A1	01-11-2001	AU WO	5317801 / 0176648 /	•	23-10-2001 18-10-2001
JP 6262937	Α	20-09-1994	NONE			
JP 11211126	Α	06-08-1999	JP	3254416	B2	04-02-2002